

What is claimed:

1. A vaso-occlusive coil having an elongate helical primary shape, the primary shape defining a primary axis, the coil further having a three-dimensional secondary shape, the secondary shape comprising a substantially helical first section and a second section having a plurality of non-overlapping loops, each loop defining a plane oriented at an angle from about thirty degrees to about one hundred fifty degrees relative to a plane defined by any immediately preceding or any immediately succeeding loop along the primary axis.

2. The coil of claim 1, the loops including generally circular loops.

3. The coil of claim 1, the loops including generally elliptical loops.

4. The coil of claim 1, the primary shape being wound into the secondary shape, the loops being wound without contacting each other.

5. The coil of claim 1, the loops of the secondary shape not contacting each other, absent a force being applied to the secondary shape.

5 6. The coil of claim 1, the secondary shape further comprising a substantially helical third section, wherein the second section is disposed along the primary axis between the first and third sections.

10 7. The coil of claim 1, each loop defining a plane oriented generally orthogonal to a plane defined by any immediately preceding or succeeding loop along the primary axis.

15 8. The coil of claim 1, wherein at least two loops define respective planes disposed generally parallel to each other.

9. The coil of claim 1, each loop defining a plane disposed generally parallel to a plane defined by another loop.

20 10. The coil of claim 1, the second section having up to about fifteen loops.

11. The coil of claim 1, at least one loop being wound about an axis for less than about three hundred sixty degrees.

12. The coil of claim 1, at least one loop being wound  
5 around an axis for less than about two hundred seventy degrees.

13. The coil of claim 1, at least one loop being wound around an axis for less than about one hundred eighty degrees.

10 14. A vaso-occlusive coil, comprising  
a substantially helical primary shape defining a primary axis, the primary shape being wound into a three-dimensional secondary shape, the secondary shape comprising  
a substantially helical first section, and  
15 a second section immediately following the first section along the primary axis, the second section comprising a plurality of non-overlapping loops, including a first loop, a second loop immediately following the first loop along the primary axis, and a third loop immediately following the second loop along the  
20 primary axis,

wherein the first loop defines a plane oriented at an angle of at least about thirty degrees relative to a plane defined by the second loop, and the second loop defines a plane oriented at

an angle of at least about thirty degrees relative to a plane defined by the third loop.

15. The coil of claim 14, the secondary shape further  
5 comprising a third section immediately following the second section along the primary axis.

16. The coil of claim 14, the loops being wound without contacting one another.

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17. The coil of claim 14, the first loop defining a plane oriented generally orthogonal to a plane defined by the second loop, and the second loop defining a plane oriented generally orthogonal to a plane defined by the third loop.

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18. The coil of claim 14, the first loop defining a plane disposed generally parallel to a plane defined by the third loop.

19. The coil of claim 14, the second section further  
20 comprising a fourth loop immediately following the third loop along the primary axis, wherein the third loop defines a plane oriented at an angle of at least about thirty degrees relative to a plane defined by the fourth loop.

20. The coil of claim 19, the first loop defining a plane disposed generally parallel to a plane defined by either of the third or fourth loops.

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21. The coil of claim 13, wherein respective planes defining the first, second and third loops form a generally triangular configuration.